PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

A mmli sa	41		6			
Applicant's or agent's file reference 63103			icrence	FOR FURTHER A	ACTION	See Form PCT/IPEA/416
International application No.			١.	International filing da	ate (day/month/year)	Priority date (day/month/year)
PCT/EP2004/051337			51337	02.07.200		11.07.2003
Internation	onal Pat	ent Classifi	cation (IPC) or nati	onal classification and	IPC	1
H02F	K9/1	.97				
Applican						•
THAI	LES					
L						
1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.					
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.				g this cover sheet.	
3.	_	_	accompanied by A	NNEXES, comprising	:	
	a. 🗵	(sent to	o the applicant and	to the International B	ureau) a total of 2	sheets, as follows:
			heets of the descrip	otion, claims and/or dra	awings which have been a	amended and are the basis for this report and/or alle 70.16 and Section 607 of the Administrative
		i	nstructions).	curreations authorized	by this Authority (see Ku	ile 70.10 and Section 607 of the Administrative
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental					siders contain an amendment that goes beyond in item 4 of Box No. I and the Supplemental
	_	F	Box.			
	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))					
	, containing a sequence listing and/or tables					
	related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4.	This re	port contai	ns indications relati	ng to the following ite	ms:	
	\boxtimes	Box No. I	Basis of the	report		
	\sqsubseteq	Box No. I	I Priority			
		Box No. I	II Non-establi	shment of opinion with	h regard to novelty, invent	tive step and industrial applicability
	\sqsubseteq	Box No. I	V Lack of uni	ty of invention		
	\boxtimes	Box No. V	Reasoned st	tatement under Article d explanations support	35(2) with regard to nove ing such statement	elty, inventive step or industrial applicability;
		Box No. V	/I Certain doc	uments cited		
	\boxtimes	Box No. V	/II Certain defe	ects in the international	l application	
		Box No. V	/III Certain obs	ervations on the intern	ational application	
Date of submission of the demand Date of completion of this report			nis report			
						-
Name and mailing address of the IPEA/EP					Authorized officer	
Facsimile No.				Telephone No.		

Translation

International application No.
PCT/EP2004/051337

Box	No. I	Basis of the report		
1.		n regard to the language, this report is based on the internation	al application in the language in	hich it was filed, unless otherwise
		cated under this item.		ab Med, ainess officiwise
		This report is based on translations from the original language which is the language of a translation furnished for the purpo		
		international search (Rule 12.3 and 23.1(b))		
		publication of the international application (Rule 12.4))	
		international preliminary examination (Rule 55.2 and/o	·	
2.	recei	n regard to the elements of the international application, this iving Office in response to an invitation under Article 14 are report):		
		the international application as originally filed/furnished		
	\boxtimes	the description:		
		pages <u>1-4</u>		as originally filed/furnished
		pages*	received by this Authority on	
	_	pages*	received by this Authority on	
	\boxtimes	the claims:		
		nos.		as originally filed/furnished
		nos.*	as amended (together	with any statement) under Article 19
		nos.* 1-7	received by this Authority on _	07.01.2005 with letter of 04.01.2005
	_	nos.*	received by this Authority on _	
	\boxtimes	the drawings:		
		sheets <u>1/2-2/2</u>		as originally filed/furnished
		sheets*	received by this Authority on _	
	_	sheets*	received by this Authority on _	
		a sequence listing and/or any related table(s) - see Supplement	ental Box Relating to Sequence Li	sting.
3.		The amendments have resulted in the cancellation of:		
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as file	lments annexed to this report and led, as indicated in the Supplement	listed below had not been made, since al Box (Rule 70.2(c)).
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
*	If ite	em 4 applies, some or all of those sheets may be marked "sup	erseded."	

International application No.
PCT/EP2004/051337

Box No. V		Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement						
	Novelty	(N)	Claims 1-7	YES			
			Claims	NO			
	Inventive	e step (IS)	Claims 1-7	YES			
			Claims				
	Industria	l applicability (IA)	Claims 1-7	YES			
			Claims				
2.	Citations an	d explanations (Rule 7	(0.7)				
	1. The application relates to a stator for an						
			l machine, in particular, a machine that				
			at a high temperature and is cooled by				
			coolant circulation.				
	2	In the pr	esent report, reference is made to the				
	following documents:						
		D1: US 4	908 347 A (DENK JOSEPH) 13 March 1990				
		(1990	-03-13);				
		D2: GB 2	145 882 A (TEIKOKU DENKI SEISAKUSHO KK)				
		3 Apr	il 1985 (1985-04-03);				
			519 269 A (LINDBERG FRANK A)				
		21 Ma	y 1996 (1996-05-21);				
			670 838 A (EVERTON JOHN M)				
		23 Se	ptember 1997 (1997-09-23).				
	3	The most	relevant prior art is described in				
	3.		relevant prior art is described in				
		document	D4, which discloses the features in the				

International application No.
PCT/EP2004/051337

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

preamble in claim 1, namely an electrical machine in which the stator cooling circuit is self-contained (it is not part of the rotor cooling circuit) and separated from the rotor cooling circuit by a sealed shell. The other documents also describe such a shell between the rotor and the stator.

- 4. The aim of the present application is to provide an electrical machine of this kind but one that has increased leakage inductance and slots deeper than necessary for housing the windings, while providing effective stator cooling.
- 5. This aim is achieved by providing a stator circuit consisting of two portions (7, 8) separated by the shell (9).

As a result, the stator winding is in a chamber while the stator magnetic circuit is, in fact, separated by means of the shell, and a portion thereof is in the other chamber where the rotor is also positioned.

- 6. None of the available prior art documents describes or suggests a solution of this kind. It follows that the subject matter of claim 1 is novel and involves an inventive step because it is the result of action performed so as to arrive at a desired result (PCT Article 33(2) and 33(3)).
- 7. Dependent claims 2 to 7 relate to alternative

International application No.
PCT/EP2004/051337

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
	embodiments of the invention and, as a result, the						
	subject matter therein is also novel and involves						
	an inventive step.						
8.	The industrial applicability of the invention is						
	obvious.						
1							

International application No.
PCT/EP2004/051337

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

- Contrary to the requirements of PCT Rule
 (ii), the description does not indicate the relevant prior art disclosed in document D4, nor does it cite said document.
- Contrary to the requirements of PCT Rule
 1(a) (iii), the description is not consistent with the claims.